In the Specification

Please replace the indicated paragraph with the written paragraph shown below:

Please replace the paragraph beginning at page 18, line 12 with the following rewritten paragraph:

"As noted, the operation of matched diode pair is well known in the art. In particular, the matched diode pair operates to produce a half-rectification of the signal input into the pair. With particular reference to Figure 2, matched diode pair 220 and 230 produce an intermediate frequency IF, which is a half-rectification of the (RF+LO) and (RF-LO) signals. The intermediate frequency signal may be provided to cascading amplifiers 240, 250, and 260 at a node, such as, node 240A. The IF is then amplified by cascading amplifiers 240, 250, and 260 to a suitable frequency range, where the suitability of the frequency is predetermined by the requirements of the receiving system."

Please replace the paragraph beginning on page 18, line 23 with the following rewritten paragraph:

"The matched diodes 312 and 314 are in an anti-parallel diode pair configuration 317, such that the input of anti-parallel diode configuration 317 is node 315. The operation of the anti-parallel diode pair is well known in the art, and accordingly will not be discussed herein in detail. Moreover, one skilled in the art will recognize the output of an anti-parallel diode pair is the half-rectification of the input frequency. As such, the anti-parallel diode pair 317 illustrated in this invention may be of any configuration wherein a frequency signal may be half-rectified in accordance with this invention. Further, one skilled in the art will recognize that other square law devices, such as FETs or bipolar transistors may be used in a ~~the~~ anti-parallel diode arrangement where the transistors may be used in a sub-harmonically pumped mixer configuration."

Please replace the ABSTRACT with the following rewritten ABSTRACT:

"A k-band frequency mixer for use with a low noise block downconverter is provided. The mixer utilizes a ku-band integrated circuit topology in a sub-harmonically pumped arrangement to downconvert a k-band radio frequency (RF) to an intermediate frequency (IF). In particular, an RF of from about 17 GHz to about 21 GHz is combined with a local oscillator frequency of about 9.75 GHz to about 11.3 GHz and then fed into an integrated circuit with an

anti-parallel diode pair to produce an intermediate frequency (IF) of from about 950 MHz to about 2.15 GHz. ~~Due to the accessibility of the integrated chip design used in this invention, mixers for use in the k-band frequency range may be wider distributed and are made more readily available and at a lower cost.~~"